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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,289	09/08/2003	Tobias Nonnast	202-079	8685

7590

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EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/656,289	Applicant(s) NONNAST ET AL.	
	Examiner Marcus Charles	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09-08-2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the first action relating to application serial number 10/656,289 filed 09-08-2003.

Claims 1-16 are currently pending.

Election/Restrictions

1. Applicant's election of species 1 (claims 1-12) in the reply filed on 02-24-2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 02-24-2006.

Specification

3. The disclosure is objected to because of the following informalities: In page 1 below the title the sub-title --Cross reference to Related Application-- included the paragraph claiming priority. Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

Art Unit: 3682

- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, line 14, the phrase "and/or" render the intended scope of the claim unclear because it is not clear if claim is referring to the fluoropolymer powder and the powder of the non-ferrous metal as inclusive such that both powders are coexist in the cover or being exclusive such that either one or the other is exist in the cover. In addition, claim 1, lines 8-10 recites the outer coating is an elastomeric layer containing polymer and fibers, and lines 11-14, recite the elastomeric

layer containing at least fibers in combination with fluoropolymer powder. Therefore, it is unclear if the polymer and fibers in lines 8-10 comprise the fluoropolymer powder and fibers of lines 11-14.

In claim 11, the term "type" or "types" render the scope of the claim indefinite because it is not clear as to what type of rubber the terms "type" or "types" are referring to.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2 and 11, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over DE (4318454) to Herrmann et al. in view of EP (0662571) to Berger et al. In claims 1-2, Herrmann et al. discloses a v-belt comprising elastomeric base (see 31) having a plurality of ribs, an elastomeric cover on the upper lower side, a tension support (14) interposed between cover and a lower second side of the base body, the ribs of the base body having an outer coating (12) thereon containing polymer and fibers (13) being tightly joined to the base body. Herrmann et al. disclose the outer coating is an elastomeric layer base on an interlaced rubber but fail to disclosed the thickness of the cover layer and the cover containing fluoropolymer. Berger et al. discloses a belt body having an outer coating (12), wherein the coating comprises fluoropolymer. Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention to modify the outer coating of Herrmann et al. to so as to contain fluoropolymer in order to reduce the effects of wear due to high temperatures. In addition, neither Herrmann et al nor Berger discloses the thickness of the coating. It would have been obvious to one of ordinary skill in the in the art at the time of the invention to modify the thickness of Herrmann device so that the thickness ranges from 0.15 to 0.25 mm, since it has been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art. In re Aller 105 USPQ 233. In addition, such a modification, would involve a mere change in size of the coating. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA).

In claim 11, in order for there to be a tight and homogeneous bond, it is apparent that the coating is based on the same rubber as the elastomeric body.

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (0662571) to Berger et al. Berger discloses a v-belt comprising elastomeric base (see 21) having ribs, an elastomeric cover on the upper lower side, a tension support (14) interposed between cover and a lower second side of the base body, the ribs of the base body having an outer coating (12) thereon containing fluoropolymer and short fibers (23) being tightly joined to the base body. Berger et al. disclose the outer coating is an elastomeric layer base on an interlaced rubber but fail to disclosed the thickness of the cover layer. It would have been obvious to one of ordinary skill in the in the art at the

time of the invention to modify the thickness of Berger et al. device so that the thickness ranges from 0.15 to 0.25 mm, since it has been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art. In re Aller 105 USPQ 233. In addition, such a modification, would involve a mere change in size of the coating. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA).

Regarding claim 8, Berger et al. also disclose the outer coating (12) contains conductive carbon black components which is a non ferrous component in order to prevent electrostatic charging of the belt. However, Berger et al. fails to disclose the ratio of the non-ferrous metal to the rubber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the belt of Berger et al. so the component of the nonferrous metal in the outer coating is 50 to 100 parts by weight per 100 parts by weight of rubber, since it has been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art. In re Aller 105 USPQ 233.

In claim 9, Berger et al. fail to disclose the shape of the particles of the non-ferrous metal and the mean diameter of the particles. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the shape of the particles of the non-ferrous metal so that they are ball-shape, platelet-shape or star-shape, since it has been held that a change in the geometrical shape of a known apparatus would have been an obvious improvement. In re daily, 149 USPQ 47 (CCPA 1976). In

addition, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mean diameter of the particles so that it is 10-80 μm , since it has been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art. In re Aller 105 USPQ 233.

In claims 3 and 5-6, Berger et al. fail to disclose the ratio the fiber and fluoropolymer powder to that of the rubber. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ratio of Berger et al. so the component of the fiber is 20-100 parts per 100 weight by weight of rubber, and the fluoropolymer powder of the outer coating is between 10-100 parts by weight of rubber or more than 50 parts by weight per 100 parts by weight of rubber, since it has been held that where the general conditions of the claims are disclosed in the prior art, discovering the optimum or workable ranges involves routine skill in the art. In re Aller 105 USPQ 233.

In claim 11, in order for there to be a tight and homogeneous bond, it is apparent that the coating is based on the same rubber as the elastomeric body.

In claim 12, Berger et al. fail to disclose the color or difference in color between the outer coating and the base. It would have been a matter of design choice to modify the outer coating and the base such that their colors differ, since applicant has not disclose that any specific color solves any stated problem or is for any particular reasons and it appears that the belt would perform equally well with any color or difference in color.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. in view of JP (56-63150) to Takeuchi et al. Berger et al. fail to disclose the non-ferrous material is copper powder. Takeuchi et al. discloses a transmission belt comprising a cover (11) containing copper powder in order to prevent the belt from electrification. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the outer coating of Berger et al. so that the non-ferrous metal is copper powder in view of Takeuchi et al. in order to prevent the belt from electrification.

Allowable Subject Matter

10. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.


Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arno et al. (3,799,824), Thomas et al. (3,839,116), Adams (3,190,137), Matsuoka et al. (4,892,510), White, Jr. (4,027,545), Speer (4,047,446), Wegele (6,561,937), and Hayashi (6,669,592) disclose a belt having a cover on the ribbed section of the belt.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marcus Charles
Primary Examiner
Art Unit 3682
March 13, 2006